L Number	Hits	Search Text	DB	Time stamp
1	914187	crystal$	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34
2	253183	benzene	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34
3	382	phenyllactic	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34
4	61149	nitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34
5	207830	enzym$	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35
6	958	hydroxyacid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:48
7	382	(562/470).CCLS.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35
8	0	("111 and 113").PN.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35
9	212	chloromandelic adj acid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35
10	113	crystal$ and (chloromandelic adj acid)	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35
11	233001	toluene	USPAT; EPO; JPO; DERWENT	2002/08/02 12:36
12	96	toluene and (crystal$ and (chloromandelic adj acid))	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37
13	5255	optically adj pure	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37
14	4930	mandelic adj acid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50
15	54011	tumor	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37
16	78	oxynitrilase	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37
17	1486219	optical purity	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37
18	24458	enrichment	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37
19	10	chloromandelonitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
20	4	crystal$ and chloromandelonitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
21	2	benzene and (crystal$ and chloromandelonitrile)	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
22	2	("5714357").PN.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
23	41	phenyllactic and nitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41

24	30	(phenyllactic and nitrile) and enzym$	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
25	10	(toluene and (crystal$ and (chloromandelic adj acid))) and (optically adj pure)	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
26	7	2-chloromandelic adj acid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:49
27	573	(mandelic adj acid) and tumor	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
28	131	(mandelic adj acid) and hydroxyacid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
29	2	(chloromandelic adj acid) and oxynitrilase	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
30	1	63219388.pn.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
31	5	5223416.URPN.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
32	3	(chloromandelic adj acid) and enrichment	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
33	3	4859784.pn.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41
34	1		USPAT	2002/08/02 12:47
35	1		USPAT	2002/08/02 12:47
36	11479	hydroxycarboxylic	USPAT; EPO; JPO; DERWENT	2002/08/02 12:48
37	2799	methylisobutyl	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50
38	0	(chloromandelic adj acid) and methylisobutyl	USPAT; EPO; JPO; DERWENT	2002/08/02 12:49
39	2485	methylisobutyl adj ketone	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50
40	16	(methylisobutyl adj ketone) and (mandelic adj acid)	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	914187	crystal$	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34		Truncation overflow.
2	BRS	L2	253183	benzene	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34		
3	BRS	L3	382	phenyllactic	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34		
4	BRS	L4	61149	nitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:34		
5	BRS	L5	207830	enzym$	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35		Truncation overflow.
6	BRS	L6	958	hydroxyacid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:48		
7	IS&R	L7	382	(562/470).CCLS.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35		
8	IS&R	L8	0	("111 and 113").PN.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35		
9	BRS	L9	212	chloromandelic adj acid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35		
10	BRS	L10	113	crystal$ and (chloromandelic adj acid)	USPAT; EPO; JPO; DERWENT	2002/08/02 12:35		Truncation overflow.

	Errors
1	1
2	0
3	0
4	0
5	1
6	0
7	0
8	0
9	0
10	1

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
11	BRS	L11	233001	toluene	USPAT; EPO; JPO; DERWENT	2002/08/02 12:36		
12	BRS	L12	96	toluene and (crystal$ and (chloromandelic adj acid))	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37		Truncation overflow.
13	BRS	L13	5255	optically adj pure	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37		
14	BRS	L14	4930	mandelic adj acid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50		
15	BRS	L15	54011	tumor	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37		
16	BRS	L16	78	oxynitrilase	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37		
17	BRS	L17	1486219	optical purity	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37		
18	BRS	L18	24458	enrichment	USPAT; EPO; JPO; DERWENT	2002/08/02 12:37		
19	BRS	L19	10	chloromandelonitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
20	BRS	L20	4	crystal$ and chloromandelonitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		Truncation overflow.

	Errors
11	0
12	1
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	1

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
21	BRS	L21	2	benzene and (crystal$ and chloromandelonitrile)	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		Truncation overflow.
22	IS&R	L22	2	("5714357").PN.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
23	BRS	L23	41	phenyllactic and nitrile	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
24	BRS	L24	30	(phenyllactic and nitrile) and enzym$	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		Truncation overflow.
25	BRS	L25	10	(toluene and (crystal$ and (chloromandelic adj acid))) and (optically adj pure)	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		Truncation overflow.
26	BRS	L26	7	2-chloromandelic adj acid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:49		
27	BRS	L27	573	(mandelic adj acid) and tumor	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
28	BRS	L28	131	(mandelic adj acid) and hydroxyacid	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
29	BRS	L29	2	(chloromandelic adj acid) and oxynitrilase	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
30	BRS	L30	1	63219388.pn.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		

	Errors
21	1
22	0
23	0
24	1
25	1
26	0
27	0
28	0
29	0
30	0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
31	BRS	L31	5	5223416.URPN.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
32	BRS	L32	3	(chloromandelic adj acid) and enrichment	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
33	BRS	L33	3	4859784.pn.	USPAT; EPO; JPO; DERWENT	2002/08/02 12:41		
34	BRS	L34	1	"1984415".PN.	USPAT	2002/08/02 12:47		
35	BRS	L35	1	"4594196".PN.	USPAT	2002/08/02 12:47		
36	BRS	L36	11479	hydroxycarboxylic	USPAT; EPO; JPO; DERWENT	2002/08/02 12:48		
37	BRS	L37	2799	methylisobutyl	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50		
38	BRS	L38	0	l9 and l37	USPAT; EPO; JPO; DERWENT	2002/08/02 12:49		
39	BRS	L39	2485	methylisobutyl adj ketone	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50		
40	BRS	L40	16	l39 and l14	USPAT; EPO; JPO; DERWENT	2002/08/02 12:50		

	Errors
31	0
32	0
33	0
34	0
35	0
36	0
37	0
38	0
39	0
40	0

NEWS 25 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 26 Jul 30 NETFIRST to be removed from STN

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information.
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:23:03 ON 02 AUG 2002

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'CAPLUS' ENTERED AT 12:23:10 ON 02 AUG 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 2 Aug 2002 VOL 137 ISS 6
FILE LAST UPDATED: 1 Aug 2002 (20020801/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> chloromandelonitrile

```
            14 CHLOROMANDELONITRILE
             1 CHLOROMANDELONITRILES
L1          15 CHLOROMANDELONITRILE
                  (CHLOROMANDELONITRILE OR CHLOROMANDELONITRILES)

=> methylisobutyl ketone
           385 METHYLISOBUTYL
        119786 KETONE
         97558 KETONES
        175423 KETONE
                  (KETONE OR KETONES)
L2         278 METHYLISOBUTYL KETONE
                  (METHYLISOBUTYL(W)KETONE)

=> l1 and l2
L3           0 L1 AND L2

=> file reg
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       6.07       6.28

FILE 'REGISTRY' ENTERED AT 12:24:40 ON 02 AUG 2002
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STRUCTURE FILE UPDATES:   31 JUL 2002  HIGHEST RN 441711-84-8
DICTIONARY FILE UPDATES:  31 JUL 2002  HIGHEST RN 441711-84-8

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> e chloromandelonitrile/cn
E1           1      CHLOROMALOSIDE D/CN
E2           1      CHLOROMALOSIDE E/CN
E3           0 --> CHLOROMANDELONITRILE/CN
E4           1      CHLOROMARMIN/CN
E5           1      CHLOROMELANITE/CN
E6           1      CHLOROMELANITE
((AL0.3-0.4FE0.3-0.4MG0.3-0.4)SI2(NA0.6-0.7CA
                    0.3-0.4)O6)/CN
E7           1      CHLOROMENITE/CN
E8           1      CHLOROMERCURI-6-BENZAMIDOPURINE/CN
E9           1      CHLOROMERCURI-N-BENZOYLADENINE/CN
E10          1      CHLOROMERCURIC DIPHENYLTHIOCARBAZONATE/CN
E11          1      CHLOROMERCURIO-5-URACIL/CN
E12          1      CHLOROMERCURIOACETIC ACID/CN

=> e 2-chloromandelonitrile/cn
E1           1      2-CHLOROMANDELALDEHYDE/CN
E2           1      2-CHLOROMANDELIC ACID/CN
```
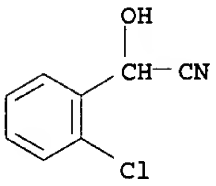

```
E3            1 --> 2-CHLOROMANDELONITRILE/CN
E4            1     2-CHLOROMELATONIN/CN
E5            1     2-CHLOROMERCURI-1,4,6-PREGNATRIENE-3,20-DIONE/CN
E6            1
2-CHLOROMERCURI-17.ALPHA.-METHYL-1,4,6-ANDROSTATRIENE-17.BET
                    A.-OL-3-ONE/CN
E7            1     2-CHLOROMERCURI-2'-IODOAZOBENZENE/CN
E8            1     2-CHLOROMERCURI-2'-NITROAZOBENZENE/CN
E9            1     2-CHLOROMERCURI-3,3,3-TRIFLUORO-1-PROPANOL/CN
E10           1     2-CHLOROMERCURI-3-ACETOXYCYCLOHEXANONE/CN
E11           1     2-CHLOROMERCURI-3-HYDROXYCYCLOHEXANONE/CN
E12           1     2-CHLOROMERCURI-3-METHOXYCYCLOHEXANONE/CN

=> e3
L4            1 2-CHLOROMANDELONITRILE/CN

=> d l4

L4   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   13312-84-0  REGISTRY
CN   Benzeneacetonitrile, 2-chloro-.alpha.-hydroxy- (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Mandelonitrile, o-chloro- (6CI, 7CI, 8CI)
OTHER NAMES:
CN   (.+-.)-2-Chloromandelonitrile
CN   (o-Chlorophenyl)glycolonitrile
CN   2-Chlorobenzaldehyde cyanohydrin
CN   2-Chloromandelonitrile
CN   o-Chlorobenzaldehyde cyanohydrin
CN   o-Chloromandelonitrile
FS   3D CONCORD
DR   137766-65-5
MF   C8 H6 Cl N O
LC   STN Files:   BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, SPECINFO,
TOXCENTER,
       USPATFULL
         (*File contains numerically searchable property data)
```




```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             20 REFERENCES IN FILE CA (1967 TO DATE)
             20 REFERENCES IN FILE CAPLUS (1967 TO DATE)
              3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)


=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 5.96      12.24
```

FILE 'CAPLUS' ENTERED AT 12:25:33 ON 02 AUG 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 2 Aug 2002 VOL 137 ISS 6
FILE LAST UPDATED: 1 Aug 2002 (20020801/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> l4
L5 22 L4

=> file caplusd his
'CAPLUSD' IS NOT A VALID FILE NAME
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.
ENTER A FILE NAME OR (IGNORE):end

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.19	13.43

FILE 'CAPLUS' ENTERED AT 12:27:06 ON 02 AUG 2002
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FILE COVERS 1907 - 2 Aug 2002 VOL 137 ISS 6
FILE LAST UPDATED: 1 Aug 2002 (20020801/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> d his

     (FILE 'HOME' ENTERED AT 12:23:03 ON 02 AUG 2002)

     FILE 'CAPLUS' ENTERED AT 12:23:10 ON 02 AUG 2002
L1            15 CHLOROMANDELONITRILE
L2           278 METHYLISOBUTYL KETONE
L3             0 L1 AND L2

     FILE 'REGISTRY' ENTERED AT 12:24:40 ON 02 AUG 2002
                E CHLOROMANDELONITRILE/CN
                E 2-CHLOROMANDELONITRILE/CN
L4             1 E3

     FILE 'CAPLUS' ENTERED AT 12:25:33 ON 02 AUG 2002
L5            22 L4

     FILE 'CAPLUS' ENTERED AT 12:27:06 ON 02 AUG 2002

=> l2 and l5
L6             0 L2 AND L5

=> ?ether
L7       1038830 ?ETHER

=> l7a nd l5
MISSING OPERATOR ND L5
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> l7 and l5
L8             2 L7 AND L5

=> d l8 1-2 ti

L8   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2002 ACS
TI   Preparation of optically active o-chloromandelic acid

L8   ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2002 ACS
TI   Substituted benzyloxychloroethoxyethane herbicide antidotes


=> d l8 1 ti fbib abs

L8   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2002 ACS
TI   Preparation of optically active o-chloromandelic acid
AN   2002:286689  CAPLUS
DN   136:309759
TI   Preparation of optically active o-chloromandelic acid
IN   Hyoda, Toshiharu; Nawata, Hidetoshi
PA   Japan Hydrazine Company Inc., Japan
SO   Jpn. Kokai Tokkyo Koho, 10 pp.
```

CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002114737	A2	20020416	JP 2000-311103	20001011

AB (R)-(-)-o-chloromandelic acid was prepd. by mixing racemic o-chloromandelic acid with (S)-(+)-alanine, isolating crystd. (R)-(-)-o-chloromandelic acid-(S)-(+)-alanine inclusion complex, and decomplexation of the complex with acids or by solvent extn. (.+-.)-O-chloromandelic acid [prepd. from o-chlorobenzaldehyde] was reacted with (S)-(+)-alanine in H2O at 70.degree. to give 44.8% (R)-(-)-o-chloromandelic acid-(S)-(+)-alanine inclusion complex, which was treated with HCl in H2O-Me tert-Bu **ether** at room temp. to give 30.8% (R)-(-)-o-chloromandelic acid (based on racemic o-chloromandelic acid).

=> logoff holdf
'HOLDF' IS NOT VALID HERE
For an explanation, enter "HELP LOGOFF".

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	8.44	21.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.62	-0.62

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:33:12 ON 02 AUG 2002